

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A structure formed on a semiconductor substrate comprising:
a plurality of isolation filled trenches in a first region of the substrate;
~~a memory cell including~~ a plurality of holes in the substrate, each having a plurality of
sidewalls and a bottom wall, said ~~memory cell~~ holes adjacent to each other and located in
a second region of the semiconductor substrate in which said plurality of isolation filled
trenches are absent, said holes having a depth proximate that of said plurality of isolation
filled trenches;
insulating material present in each of said plurality of holes on said plurality of sidewalls
and bottom wall; and
a conductor overfilling each of said holes and extending onto an adjacent upper surface of
the substrate[[:]]
~~wherein said plurality of holes electrically isolate said memory cell from an adjacent
memory cell.~~
2. (Original) The structure of Claim 1 further comprising counter-doped regions present in
pillar areas of said semiconductor substrate that surround said holes.
3. (Original) The structure of Claim 1 further comprising well implants regions located in
said semiconductor substrate.
4. (Original) The structure of Claim 1 further comprising at least one transfer device located
atop a surface of said semiconductor substrate adjoining said plurality of holes.
5. (Original) The structure of Claim 4 wherein said at least one transfer device is a field
effect transistor.

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6. (Original) The structure of Claim 2, wherein said insulating material is thicker on said bottom walls of said plurality of holes than on said plurality of sidewalls of said plurality of holes.
7. (Original) The structure of Claim 6, wherein said insulating material is disposed on said upper surface of the substrate beneath portions of said conductor thereon.
8. (Original) The structure of Claim 1, wherein said holes have a depth greater than said plurality of isolation-filled trenches.
9. (Original) The structure of Claim 8, wherein an isolation dopant region is disposed below said bottom walls of said plurality of holes.
10. (Original) The structure of Claim 1, wherein the substrate has a buried insulation region, and wherein said plurality of holes extend into said buried insulation region.

Claims 11-20. (Canceled)

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